***

EXHIBIT 24

TELEPHONE (661) 410-7500 FAX (661) 410-7506

VALLEY WATER MANAGEMENT COMPANY

7500 MEANY AVE.
BAKERSFIELD, CALIFORNIA 93308

November 28, 2018

Patrick Pulupa
Executive Officer
Central Valley Regional Water Quality Control Board
11020 Sun Center Dr., Ste. 200
Rancho Cordova, CA 95670

RE: ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 –VALLEY WATER MANAGEMENT CO. RESPONSE TO LETTER DATED 13 SEPTEMBER 2018

Dear Mr. Pulupa,

Valley Water Management Company (Valley Water) respectfully submits the attached technical report and timeline, as required by the 13267 Order Letter we received on September 13, 2018. This report is an addendum of our previous reconnaissance level survey in the Cymric area (see attached report). The report goes into greater detail investigating areas where we are able to drill additional monitoring wells that have good hydrogeological relevance, but are not hampered by biological concerns.

In order to select the locations seen in the attached report, Valley Water worked with a biologist from McCormick Biological to identify areas of disturbed land using aerial photographs that may be suitable in size to accommodate a drilling rig. After identifying the areas, McCormick was able to validate whether these locations are suitable to drill on without initiating Blunt Nosed Leopard Lizard protocol surveys. While we will need to discuss two of the locations that seem feasible, we have already initiated discussions to obtain an access agreement to drill on the CYM-21D2 location (CYM-20A1) discussed in the report. Using USGS nomenclature, the following wells are proposed for installation at this time: CYM-17E1 and CYM-20A1 (see attached map). Drilling and well construction will follow the approved Monitoring Well Installation and Sampling Plan that was submitted earlier this year.

During our meeting on October 26th the Regional Board offered to assign a geologist to assist us in vetting possible locations where we might be able to install additional monitoring wells prior to any protocol surveys. Valley Water is requesting that the geologist now be assigned so we can discuss these two proposed locations in a timely manner.

Sincerely,

Jason L. Meadors, PE
General Manager
Valley Water Management Company

enc: Biological Evaluation dated October 1, 2018
Biological Evaluation dated November 27, 2018
Timeline for Biological Tasks
McKittrick 1&1-3 Map – Proposed Well Locations

cc: Clay Rodgers, Assistant Executive Officer, CVRWQCB
Jim Waldron, Valley Water (via email)

TELEPHONE (661) 410-7500 FAX (661) 410-7506

VALLEY WATER MANAGEMENT COMPANY
7500 MEANY AVE.
BAKERSFIELD, CALIFORNIA 93308

3 October 2018

Ms. Alejandra Lopez
Engineering Geologist
California Regional Water Quality Control Board
Central Valley Region
1685 E Street, Suite 200
Fresno, CA 93706

RE: RESPONSE TO ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 – Valley Water Management Company – McKittrick 1 & 1-3 Facility in Kern County

Dear Ms. Lopez:

Valley Water Management Company (Valley Water) respectfully submits the attached biological assessment as ordered by the 13267 investigative Order (Order) dated 13 September 2018, issued for MRP R5-2018-0808 by the Central Valley Regional Water Quality Control Board (CVRWQCB). The assessment was performed by McCormick Biological Inc. (MBI) on 27 September 2018 for all proposed monitoring well locations addressed in the Revised Monitoring Well Installation and Sampling Plan (MWISP) submitted to the CVRWQCB on 27 August 2018 by Valley Water.

Per Item 1 of the Order, a technical report describing the results of an updated assessment completed by a qualified biologist of all proposed well locations and describing which well sites need additional biological review for endangered species prior to monitoring well construction is required.

Unfortunately, as you will see in the attached report, MBI found and identified habitat and endangered species at <u>all</u> proposed monitoring well locations. This finding will prohibit Valley Water from beginning well pad construction on any of the monitoring well sites until after all required additional biological and plant surveys are completed. Thus, Item 2 of the Order cannot be completed at this time since no well sites were identified where further biological surveys were not required. Similarly, Item 3 cannot be addressed at this time since additional biological reviews will be required at all well sites in the future. The MBI report and the California Department of Fish and Wildlife Blunt Nosed Leopard Lizard (BNLL) survey protocols indicate that well construction will not be completed until after all annual plant blooming cycles are completed and after the final date for the

complete BNLL survey of September 15, 2019. This required additional work will cause delays in Item 6.

Although Valley Water is dedicated to completing this work in an urgent and timely fashion, Valley Water cannot undertake work without completing all required biological hurdles being cleared under the state and federal Endangered Species Acts.

Nevertheless, Valley Water will provide the CVRWQCB with the updated schedule of the additional surveying and permitting processes on or before 28 November 2018 as requested in the Order dated 13 September 2018. Per Item 5, Valley Water will also provide the CVRWQCB with an update for biological activities starting on 10 November 2018 and continuing every 10th of each month until the wells are completed. This letter serves as the October 2018 update, as required by Item 5 of the Order.

We appreciate receiving the conditional approval of our MWISP from the CVRWQCB's as that approval provides clarity and the ability for Valley Water to move forward with process of constructing of the proposed monitoring wells.

Please let me know if you have questions or would like to discuss any information regarding the attached report or the project in its entirety.

Respectfully Submitted,

Jason L. Meadors, PE
Manager

CC: Clay Rodgers, Assistant Executive Officer CRWQCB
Russell Emerson, Valley Water
Chris Reedy, Valley Water
Jim Waldron, Valley Water
Melissa Thorme, Downey Brand LLP
Stuart Childs, Kennedy Jenks
Margaret Wild, Kennedy Jenks

Encl: Biological Evaluation for Valley Water - Cymric Well Locations

From: Christopher Reedy <creedy@valleywatermanagement.org>
Sent: Wednesday, October 03, 2018 2:45 PM
To: Lopez, Alejandra@Waterboards
Cc: Rodgers, Clay@Waterboards; Harvey, Dale@Waterboards; Holcomb, Ronald@Waterboards; Jim Waldron; Jason Meadors; Margaret Wild; Thorme, Melissa; Stuart Childs; Jean Pledger; CentralValleyFresno@waterboards.ca.gov
Subject: 13267 R5-2018-0808 Non Enforcement
Attachments: Cover Letter.pdf; Valley Water Management Bio Site Evaluation Letter 10-1-2018.pdf

Dear Ms. Lopez,
Please see the attached cover letter and biological report. These documents satisfy item 1 of the requirements listed in the 13267 order (non enforcement) that Valley Water Management Company received on 9/13/2018, regarding MRP R5-2018-0808. Please feel free to reach out to me should you have any questions.
Sincerely,

Christopher Reedy
Staff Engineer
Valley Water Management
7500 Meany Ave, Bakersfield Ca 93308
Creedy@Valleywatermanagement.org
661-802-3059

McCORMICK
BIOLOGICAL, INC.
Biological Sciences – Inventory, Permitting, and Planning

October 1, 2018

Mr. Christopher Reedy
Staff Engineer
Valley Water Management
7500 Meany Avenue
Bakersfield, CA 93308

Subject: Biological Evaluation for Proposed Valley Water Management Cymric Well Locations, Kern County, California

Dear Mr. Reedy:

The purpose of this letter is to document the results from a reconnaissance-level field survey for the proposed installation of six monitoring well locations in Section 17, Township 29 South, Range 22 East, and Section 25, Township 29 South, Range 21 East, Mount Diablo Base and Meridian (M. D. B. M.), northwest of Buttonwillow, California (Attachments 1 through 5). Partial access routes to several of the sites exist along old dirt roadways; however, remaining portions of the access routes are located in Valley Saltbush Scrub habitat. The well locations and access to them were evaluated as were the potential impacts to biological resources, primarily state- or federal-listed threatened and/or endangered species (Attachments 6 and 7).

A literature search was conducted to obtain background information regarding the potential biological resources of the proposed project area. The literature search included accessing the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) within the Lokern and Belridge United States Geological Survey (U.S.G.S.) 7.5-Minute Quadrangles. Attachments 8 through 11, provide maps depicting recorded occurrences of special-status species near the project.

The proposed project is located within the range of several threatened and/or endangered wildlife taxa including San Joaquin kit fox (*Vulpes macrotis mutica*; SJKF), blunt-nosed leopard lizard (*Gambelia sila*; BNLL), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), Swainson's hawk (*Buteo swainsoni*), San Joaquin antelope squirrel (=Nelson's antelope squirrel; *Ammospermophilus nelsoni*; SJAS), giant kangaroo rat (*Dipodomys ingens*; GKR), and short-nosed kangaroo rat (*Dipodomys nitratoides brevinasus*). In addition, listed plant taxa that may occur in the vicinity of the project include: California jewelflower (*Caulanthus californicus*), San Joaquin woollythreads (*Monolopia congdonii*), Kern mallow (*Eremalche kernensis*), and the delisted Hoover's woollystar (*Eriastrum hooveri*). All of the potentially occurring listed plant species are annuals. Please note that the site visit conducted by McCormick Biological, Inc. (MBI), was completed at an inappropriate time for annual plant taxa identification.

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These plant and animal species are protected primarily through the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Each of these laws, among other provisions, prohibits *take* of listed threatened and endangered species. Although the definition of take under each law varies somewhat, in general, injuring or killing listed species without a permit issued by the United States Fish and Wildlife Service (USFWS) and/or the CDFW is unlawful. Under FESA, harassment and/or significant habitat destruction could also be considered take.

MBI personnel Rainy Reedy, biological field technician and Waring Laurendine, senior biologist, conducted a site visit on September 27, 2018. Belt transects spaced at 30 feet (9 meters) apart were walked to assess biological resources over each well location and potential access routes, if applicable. A list of plant and wildlife species observed during the biological field survey is provided in Attachment 12. All well locations are in close proximity to lands owned by the CDFW–Lokern Ecological Reserve.

The paragraphs below discuss special-status plant and wildlife species that have the potential to occur on or in the vicinity of the proposed monitoring well project.

San Joaquin kit fox: The habitat observed in the project area is suitable to support SJKF. Several potential earthen dens and one atypical den were observed during the surveys. The well locations are in the known range for SJKF and will require implementation of appropriate avoidance measures to reduce the potential for direct impacts to this species. SJKF dens were classified as potential, known, natal, or atypical as defined by the *USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011).

Blunt-nosed leopard lizard: The well locations are in close proximity to the Lokern Ecological Reserve which is known to support a healthy population of BNLL. Along with being listed as endangered under both state and federal endangered species acts, this species is *fully protected* under California law. Its status as a fully protected species, meaning that no BNLL can be killed or injured, even under the coverage of a state or federal endangered species act permit.

The project site represents suitable habitat for BNLL, and the species is known to occur in the vicinity of the project; however, protocol surveys were conducted during the 2015 survey season with no individuals observed. The CDFW considers survey results valid for 1 year; therefore, focused surveys following CDFW *2004 Approved Survey Methodology for the Blunt-nosed Leopard Lizard* would likely be recommended by CDFW. These surveys consist of a series of site visits during which transects are completed to document the resources present. The CDFW survey protocol contains specific time, weather, and survey-day patterns.

Completion of the blunt-nosed leopard lizard survey protocol requires 12 days of surveys in potential habitat during the period between April 15 and July 15, and 5 days during the hatchling period between August 1 and September 15.

Burrowing owl: No evidence of burrowing owl was observed within the survey area. However, this species is likely to forage in the proposed project area. With implementation of appropriate avoidance measures, the potential for direct impacts to this species is considered low.

Loggerhead shrike: This species was not observed during the field survey, but it is known to occur in the area. This species is considered a California species of special concern and the surrounding

habitat represents suitable nesting habitat. The potential for direct impacts to this species is considered low.

Swainson's hawk: This species is known to nest in the general area. The habitat surrounding the project site does provide foraging opportunities for this species; however, no suitable nesting trees are located in close proximity to the project. The potential for direct impacts to this species is considered low.

San Joaquin antelope squirrel: Numerous SJAS were observed during the field survey (Attachment 13). Measures to avoid impacts to this species will be required and a small mammal trapping program that includes relocation of these animals may be necessary prior to well development. The potential for direct impacts to this species is considered high.

Giant kangaroo rat: Giant kangaroo rats are known to occur in the general area. During the site visit, several vertical burrows were observed indicating possible GKR precincts. Because of the numerous burrows observed, a small mammal trapping session should be completed for this species.

Giant kangaroo rat are a nocturnal species; therefore, night time trapping is the agency-recommended method of detecting this species. Sherman live-traps of suitable length are set using seed for at least four nights near burrows that could be occupied by this species. Traps are checked at a frequency determined by trapping permit conditions, typically time and temperature parameters. Trapping for this species will be conducted by a person holding the appropriate state and federal permits. Trapping for this species may be conducted during any time of year; however, winter months are discouraged because low temperatures are associated with increased stress and potential mortality for trapped individuals. In addition, extreme care must be exercised during summer months when high daytime temperatures are a risk. Although the entire site may not need to be trapped, trapping would cover each well location and potentially along designated access routes once determined. Each well location and its access route will need to be trapped for a 5-night trapping session (100 traps per session is the permit holders maximum threshold). The potential for direct impacts to this species is considered moderate to high.

Again, SJAS have been detected in the project area; therefore, at this time MBI does not anticipate the need to complete trapping for this species. However, prior to ground disturbance and well development, and as a condition of an Incidental Take Permit (ITP), CDFW may make it a condition to trap and relocate both SJAS and GKR and require a Trapping and Relocation Plan for these species.

Other special-status wildlife: Small mammal burrows that could potentially be occupied by short-nosed kangaroo rat, Tulare grasshopper mouse (*Onychomys torridus tularensis*), San Joaquin pocket mouse (*Perognathus inornatus*), or other non-listed special-status small mammals were observed in the surveyed area. Although the species of small mammals occupying the site is unknown, these species of special concern are fairly widespread in the vicinity of the project site. Therefore, a small number of individuals of these species could be impacted. Impacting a small number of individuals compared to the widespread occurrence of these species in the vicinity would not be significant in terms of the overall population of these species in the region. The potential for direct impacts to these species is considered low to moderate.

Special-status annual plants: The survey conducted by MBI was during an inappropriate blooming period for many plant species. Although no evidence of special-status plants were observed; Kern mallow was identified as occurring in a biological report prepared in 2016. A survey completed during the appropriate blooming period should be completed to determine if other endangered plants occupy the project area.

Additional biological work should be completed prior to well development. Habitat for species is available; however, protocol BNLL surveys and a small mammal trapping program should be completed at each well location, including their associated access routes (once determined) to confirm species occupation in or on the project area.

In conclusion, because of the relatively undisturbed nature of the habitat present at each well site and their potential access routes, the numerous burrows observed and the fact that avoiding all burrows is unlikely; impacts to listed threatened and endangered species (e.g., BNLL, GKR, American badger, SJKF, and SJAS) could occur. As a result, Valley Water Management should consider pursuing take authorization/permitting under the state and federal Endangered Species Acts with the CDFW and the USFWS for this project.

If you have any questions or require additional information, please do not hesitate to call.

Sincerely,

Waring B. Laurendine
Senior Biologist

Attachments

Attachment 1: Project Site Photos

Photo 1: This photograph was taken looking westward at CYM-21D1 and CYM-21D2 location. Valley Saltbush Scrub is present. Site has some previous disturbance. Numerous small mammal burrows are present.

Photo 2: This photograph was taken looking north at CYM-17H1 and CYM-17H2 well location. Valley Saltbush Scrub is present. Numerous small mammal burrows are present.

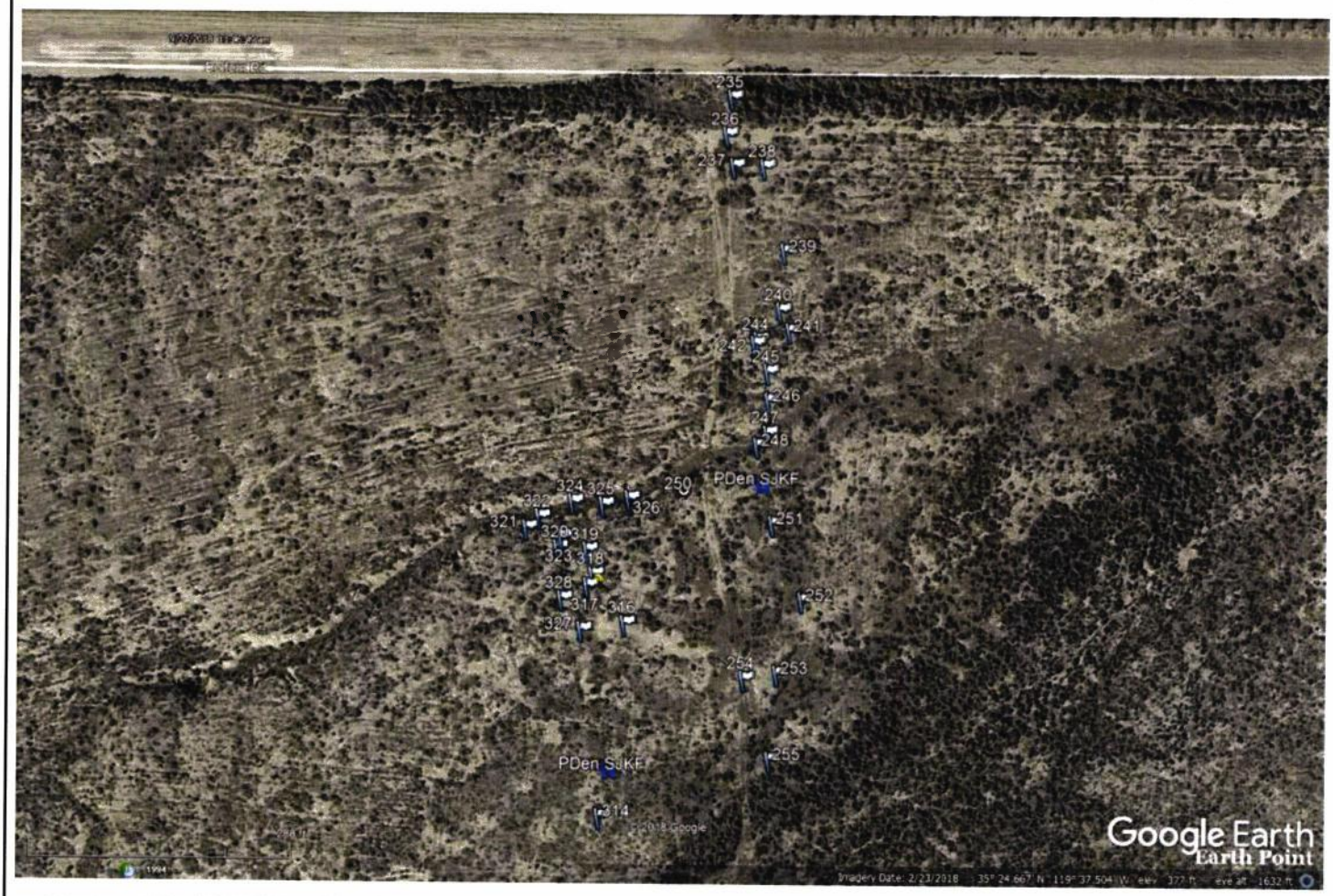
Photo 3: This photograph was taken looking westward at CYM-17A1 well location. Valley Saltbush Scrub is present. Site has some previous disturbance. Numerous small mammal burrows are present in the surrounding area.

Photo 4: This photograph was taken looking north at CYM-25B1 well location. Valley Saltbush Scrub is present. Numerous small mammal burrows are present.

Section 17, T29S, R22E, M. D. B. & M.

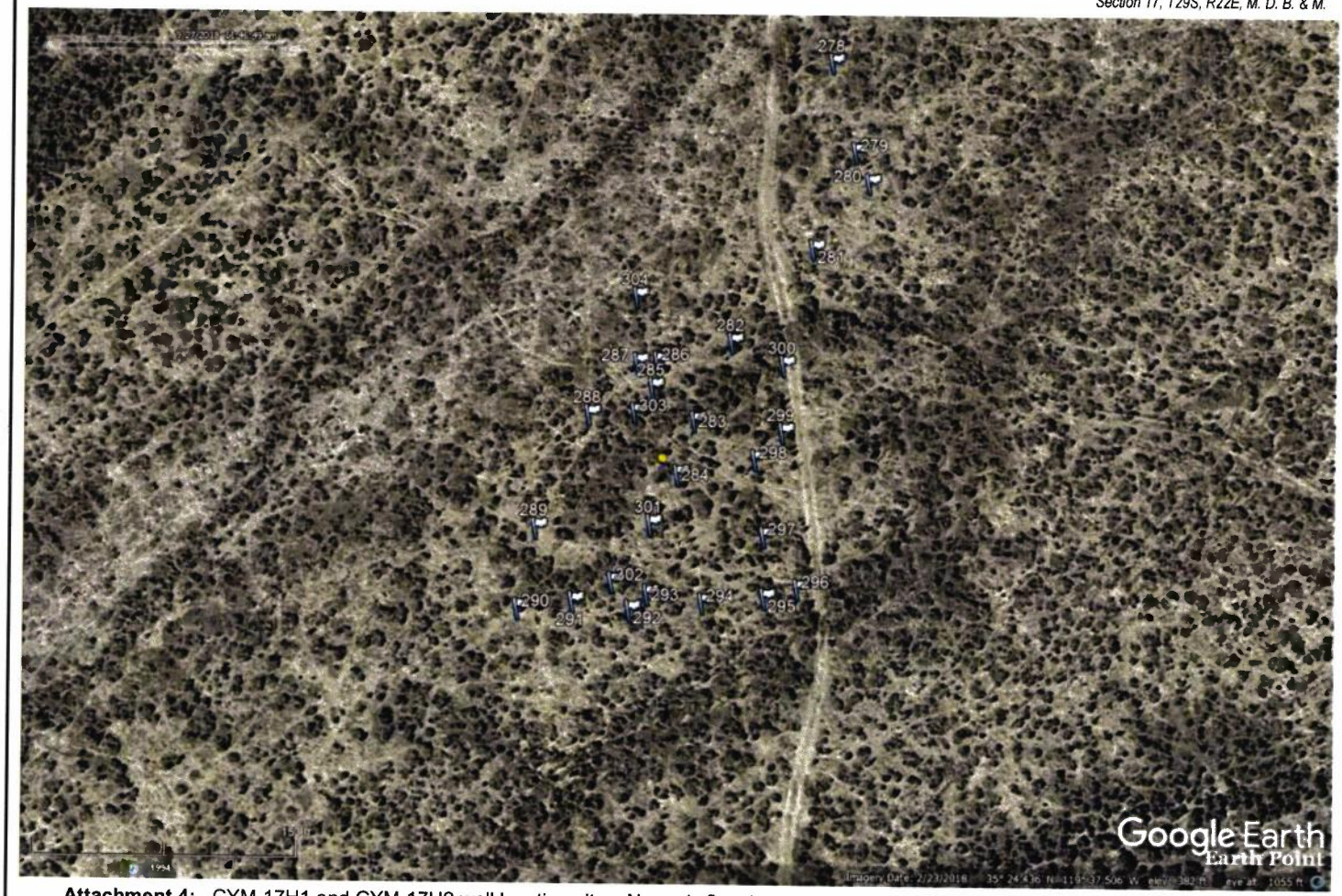
Attachment 2: CYM-21D1 and CYM- 21D2 well location sites. Numeric flagging are small mammal burrow locations. Please note that each recorded point can be more than one burrow.

Section 17, T29S, R22E, M. D. B. & M.

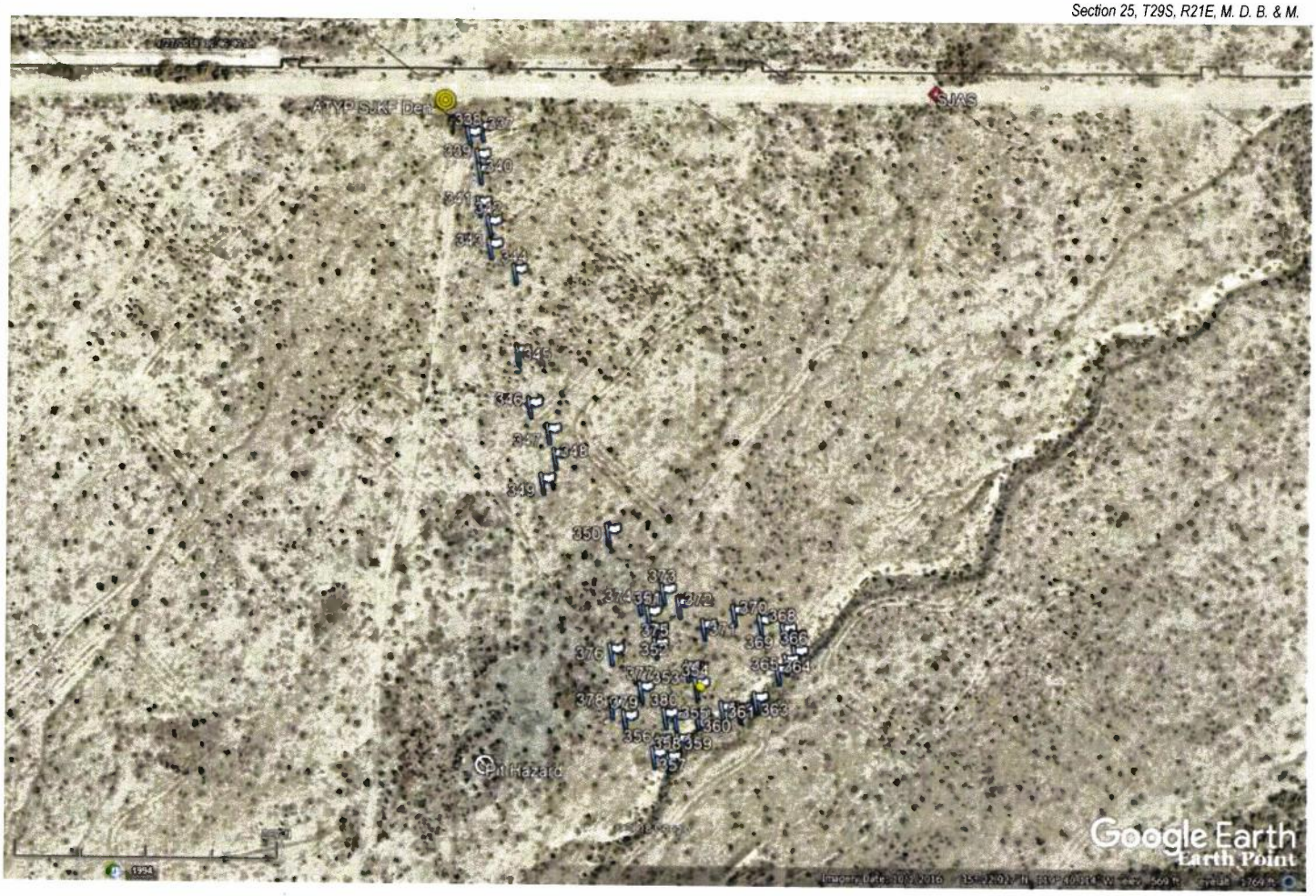


Attachment 3: CYM-17A1 well location site. Numeric flagging are small mammal burrow locations. Please note that each recorded point can be more than one burrow. Potential SJKF dens are blue stars.

Section 17, T29S, R22E, M. D. B. & M.



Attachment 4: CYM-17H1 and CYM-17H2 well location sites. Numeric flagging are small mammal burrow locations. Please note that each recorded point can be more than one burrow.



Attachment 5: CYM-25B1 well location site. Numeric flagging are small mammal burrow locations. Please note that each recorded point can be more than one burrow. San Joaquin antelope squirrel is the red diamond. SJKF Atypical den is represented by the yellow circles.

Attachment 6: Special-status Plants That May Occur in the Vicinity of the Project Site.

Scientific Name Common Name	Status Fed/State/CNPS	Brief Description	Blooming Period	Survey Results
Atriplex depressa Brittlescale	-/-/1B.2	Herbaceous annual in the Chenopodiaceae found in chenopod scrub meadows and seeps, playas, valley and foothill grasslands, and vernal pools on alkaline and clay soils, below 1,050 feet (320 meters) in elevation. Known to occur in the Great Central Valley from Tulare County north to Glenn and Butte Counties.	April to October	Habitat is available. Brittlescale was not observed during the field surveys completed for this project.
Atriplex cordulata var. *cordulata* Heartscale	S/-/1B.2	Herbaceous annual in the Chenopodiaceae found in chenopod scrub, meadows and seeps, and valley and foothill grasslands in sandy, saline or alkaline soils below 1,837 feet (560 meters) in elevation. Known to occur in the Great Central Valley from Kern County north to Southern Butte County.	April to October	Habitat is available. Heartscale was not observed during the field surveys completed for this project.
Atriplex coronata var. *vallicola* Lost Hills crownscale	S/-/1B.2	Annual herb in the Chenopodiaceae that occurs between 164 and 2,083 feet (50–635 meters) in elevation in chenopod scrub, valley and foothill grasslands, and vernal pools on alkaline soils. Known from occurrences in Southeastern San Joaquin Valley from Kern County north to Fresno County and on the Carrizo Plain.	April to August	Habitat is available. Lost Hills crownscale was not observed during the field surveys completed for this project.
Caulanthus californicus California jewelflower	E/E/1B.1	Herbaceous annual in the Brassicaceae that occurs between 200 and 3,281 feet (61–1,000 meters) elevation on sandy soils in chenopod scrub, pinyon and juniper woodland, and valley and foothill grasslands. Although many populations are thought to have been extirpated from the San Joaquin Valley, occurrences are known from Kern, Kings, Tulare, San Luis Obispo, Santa Barbara, and Fresno Counties.	February to May	Habitat is available. California jewelflower was not observed during the field surveys completed for this project.
Delphinium recurvatum Recurved larkspur	S/-/1B.2	Perennial herb in the Ranunculaceae occurring between 10 and 2,461 feet (3–750 meters) in elevation in chenopod scrub, cismontane woodland, and valley and foothill grasslands on alkaline soils. Known to occur in the Mojave Desert and Southern San Joaquin Valley in Kern County north to Solano County; the South Inner Coastal Ranges from San Luis Obispo County north to Stanislaus County, and the Sacramento Valley from San Joaquin County north to Butte County.	March to June	Habitat is available. Recurved larkspur was not observed during the field surveys completed for this project.
Eremalche parryi ssp. *kernensis* Kern mallow	E/-/1B.2	Annual herb in the Malvaceae that occurs between 230 and 4,232 feet (70–1,290 meters) in elevation in chenopod scrub, and valley and foothill grasslands. Distribution includes Kern and Tulare Counties and the Inner South Coast Ranges in San Luis Obispo and Santa Barbara Counties.	March to May	Habitat is available. Although Kern mallow was not observed during the site visit, it has been previously recorded onsite at the well locations.

Scientific Name Common Name	Status Fed/State/CNPS	Brief Description	Blooming Period	Survey Results
Eriastrum hooveri Hoover's eriastrum	D/-/4.2	Southern San Joaquin Valley from San Benito County south to Kern County and Los Angeles County. Chenopod scrub, pinyon and juniper woodland, and valley and foothill grasslands, 50-915 meters.	March to July	Habitat is available. Hoover's eriastum was not observed during the field surveys completed for this project.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	S/-/1B.1	Annual herb in the Asteraceae found between 3 and 4,003 feet (1–1,220 meters) in elevation in marshes, swamps, playas, and vernal pools. Known from occurrences in the Transverse Ranges in Santa Barbara, Ventura, and San Bernardino Counties, the Peninsular Ranges in San Diego, Orange and Riverside Counties, the South Coast in Los Angeles County, the Northern Channel Islands, the South Coast Ranges in San Luis Obispo County, the Tehachapi Mountains in Kern County, and the Southern San Joaquin Valley in Kern, Tulare, and Merced Counties.	February to June	Habitat is available. Coulter's goldfields was not observed during the field surveys completed for this project.
Madia radiata Showy golden madia	-/-/1B.1	San Joaquin Valley from Kern County north to Contra Costa county. Cismontane woodland and valley and foothill grasslands, 25-900 meters.	March to May	Habitat is available. Showy golden madia was not observed during the field surveys completed for this project.
Monolopia congdonii San Joaquin woollythreads	E/-/1B.2	Annual herb in the Asteraceae found between 197 and 2,625 feet (60–800 meters) in elevation in chenopod scrub, and valley and foothill grasslands, on sandy soils. Known to occur in the San Joaquin Valley from Kern County north to San Benito County, and the Carrizo Plain in San Luis Obispo and Santa Barbara Counties.	February to May	Habitat is available. San Joaquin woollythreads was not observed during the field surveys completed for this project.
Puccinellia simplex *California alkali grass*	-/-/1B.2	Annual herb in the Poaceae found in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools; in alkaline, vernally-mesic sinks, flats, and lake margins between 6 to 3,051 feet (2–930 meters) in elevation. Known from locations in Alameda, Butte, Contra Costa, Colusa, Fresno, Glenn, Kern, Lake, Los Angeles, Madera, Merced, Napa, San Bernardino, Santa Clara, Santa Cruz, San Luis Obispo, Solano, Stanislaus, Tulare, and Yolo Counties. This species is presumed extirpated in Kings County.	March to May	Habitat is available. California Alkali grass was not observed during the field surveys completed for this project.

Baldwin 2012; CDFG 2009

STATUS: Federal and State Listing Code

D	Delisted
E	Federal- or State-listed Endangered
S	Bureau of Land Management Sensitive Species
-	No listing status

CNPS

1B.1	Plants considered rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2	Plants considered rare, threatened, or endangered in California and elsewhere; fairly threatened in California
4.2	Plants of Limited Distribution Moderately Threatened in California
-	No listing status

Attachment 7:Special-status Wildlife That May Occur in the Vicinity of the Project Site.

Scientific Name **Common Name**	**Status Federal/State**	**General Habitat**	**Survey Results**
Amphibians			
Spea hammondii Western spadefoot toad	S/CSC	Found in the Central valley and adjacent foothills, Coast Ranges from Point Conception south to the Mexico border; valley-foothill grasslands and valley-foothill hardwood, and shallow temporary pools used for breeding below 4,472 feet (1,363 meters) in elevation.	Habitat is not present. No aquatic resources were observed on the project site.
Reptiles			
Gambelia sila Blunt-nosed leopard lizard	E/E,SFP	Found only in the San Joaquin Valley, adjacent Carrizo Plain, Elkhorn Plain, Cuyama Valley, and Panoche Valley; inhabits sparsely vegetated plains, lower canyon slopes, on valley floors, and washes; open grassland, saltbush scrub, and alkali sink are more common habitat types.	Habitat is present. Blunt-nosed leopard lizards have been recorded in the immediate area of the project well locations.
Emys marmorata Western pond turtle	-/CSC	Completely aquatic requiring calm waters such as pools or streams with vegetation banks or logs for basking. Will utilize upland habitat up to about 0.3 miles (0.5 kilometers) from water.	Habitat is not present. No aquatic resources were observed on the project site.
Masticophis flagellum ruddocki San Joaquin whipsnake (=coachwhip)	-/CSC	Found in the San Joaquin Valley in open, dry habitats. Associated with valley grassland and saltbush scrub habitats containing small mammal burrows which are used for refugia and oviposition sites.	Habitat is present. Although not observed during field surveys, this species could be present on the project or the immediate vicinity.
Birds			
Athene cunicularia Burrowing owl	S/CSC	Inhabit dry, open grasslands, rolling hills, desert floors, prairies, savannas, agricultural land, and other areas of open, bare ground. These owls will also inhabit open areas near human habitation, such as airports, golf courses, shoulders of roads, railroad embankments, and the banks of irrigation ditches and reservoirs.	Habitat is present. The project site is within the range for this species; however, no burrows/nests or sign were observed during the field surveys.
Buteo swainsoni Swainson's hawk	S/T	Riparian and sometimes large isolated trees used for nesting; grasslands and agricultural lands used for foraging; in California, breeds primarily in the Sacramento Valley, with occasional nesting to the south through Kern County; migrate through the Central and San Joaquin Valleys to their wintering grounds in South America.	No nesting habitat is available onsite; however, Swainson's hawk are known to nest at the intersection of Lokern Road and Stockdale Highway, approximately 5 miles east of the project location.
Eremophila alpestris actia California horned lark	-/WL	Resident throughout California from the coast to the deserts up to alpine dwarf-shrub habitat above tree line.	Habitat is present. Although this species was not observed during the field survey, it likely occurs in the area.

Scientific Name Common Name	Status Federal/State	General Habitat	Survey Results
Lanius ludovicianus Loggerhead shrike	-/CSC	Nests and forages in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, desert riparian, valley saltbush scrub and Joshua tree woodland; common resident and winter migrant throughout foothill and lowlands of California	Habitat is present. Although this species was not observed during the field survey, it likely occurs in the area.
Toxostoma lecontei LeConte's thrasher	-/CSC	Forages in open desert washes, a variety of desert scrub habitats, Joshua tree woodlands, and chenopod scrub; typically nests within dense shrub cover; relatively rare resident in California deserts from Mono County south to the Mexican border, western and southern San Joaquin Valley	Habitat is present. One LeConte's thrasher was observed foraging during the field survey.
Mammals			
Ammospermophilus nelsoni San Joaquin (Nelson's) antelope squirrel	S/T	Found in grasslands or open shrublands; formerly more extensive, current range includes southwestern portion of the San Joaquin Valley and in adjacent valleys to the west.	Habitat is present. Numerous San Joaquin antelope squirrels were observed during the site visit.
Dipodomys ingens Giant kangaroo rat	E/E	Western side of the San Joaquin Valley, including the Carrizo Plain and the Panoche Valley; grassland and shrub-land habitats with sparse vegetative cover and soils that are well-drained, fine sandy loams with gentle slopes.	Habitat is present. Sign of kangaroo rat occupancy is present in the habitat surrounding the project sites. Several vertical burrows were observed.
Dipodomys nitratoides brevinasus Short-nosed kangaroo rat	-/CSC	Grasslands and shrublands with fine soils; western half of the San Joaquin Valley from the Los Banos area south to the foothills of the Tehachapi Mountains, generally west and south of the California Aqueduct; through the Coast Ranges to the Carrizo Plain and the Cuyama Valley.	Habitat is present. Sign of kangaroo rat occupancy is present on the project site.
Dipodomys nitratoides nitratoides Tipton kangaroo rat	E/E	Found in arid communities on the valley floor portions of Kern, Tulare, and Kings counties in scrub and grassland communities in level to near-level terrain with alluvial fan-floodplain soil (fine sands and sandy loams) with sparse grasses and woody vegetation such as iodine bush, saltbush, seep weed, and mesquite.	Habitat is present. Sign of kangaroo rat occupancy is present on the project site; however, the project location is outside the range for Tipton kangaroo rat which is located east of the California Aqueduct.
Eumops perotis californicus Western mastiff bat	-/CSC	Conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas; roost in rock crevices, trees, tall buildings, and tunnels; southeastern San Joaquin Valley and Coast Ranges to southern California, east to the Colorado Desert	No roosting habitat available. Species may forage over the site.
Onychomys torridus tularensis Tulare grasshopper mouse	S/CSC	Found in valley grasslands habitats, blue oak savanna, desert associations dominated by annual grasses and California ephedra, alkali sink scrub, saltbush scrub, and upper Sonoran shrub associations, dominated by ephedra.	Habitat is present. This species could occupy the surrounding habitat; however, a small mammal trapping effort was not completed for this project
Perognathus inornatus San Joaquin pocket mouse	S/-	Grassland, oak savanna and arid scrubland in the southern Sacramento Valley, Salinas Valley, San Joaquin Valley and adjacent foothills, south to the Mojave Desert.	Habitat is present. This species could occupy the habitat surrounding the project site; however, a small mammal trapping effort was not completed for this project

Scientific Name **Common Name**	**Status Federal/State**	**General Habitat**	**Survey Results**
Taxidea taxus American badger	-/CSC	Uncommon resident found through California; in less disturbed grassland and shrubland habitats in San Joaquin Valley.	Habitat is present. While no badger dens were observed, badger digs were identified indicating possible presence in the area.
Vulpes macrotis mutica San Joaquin kit fox	E/T	Found in valley saltbush scrub, valley sink scrub, Interior Coast Range saltbush scrub, upper Sonoran sub-shrub scrub, non-native grassland, and valley sacaton grassland in the Central Valley and adjacent foothills and valleys, infrequently to the outer Coast Ranges; generally not found in densely wooded areas, wetland areas, or areas subject to frequent periodic flooding.	Habitat is present. The project site is within the known range for this species. No San Joaquin kit fox sign was observed however, several potential earthen dens and one atypical den were observed.

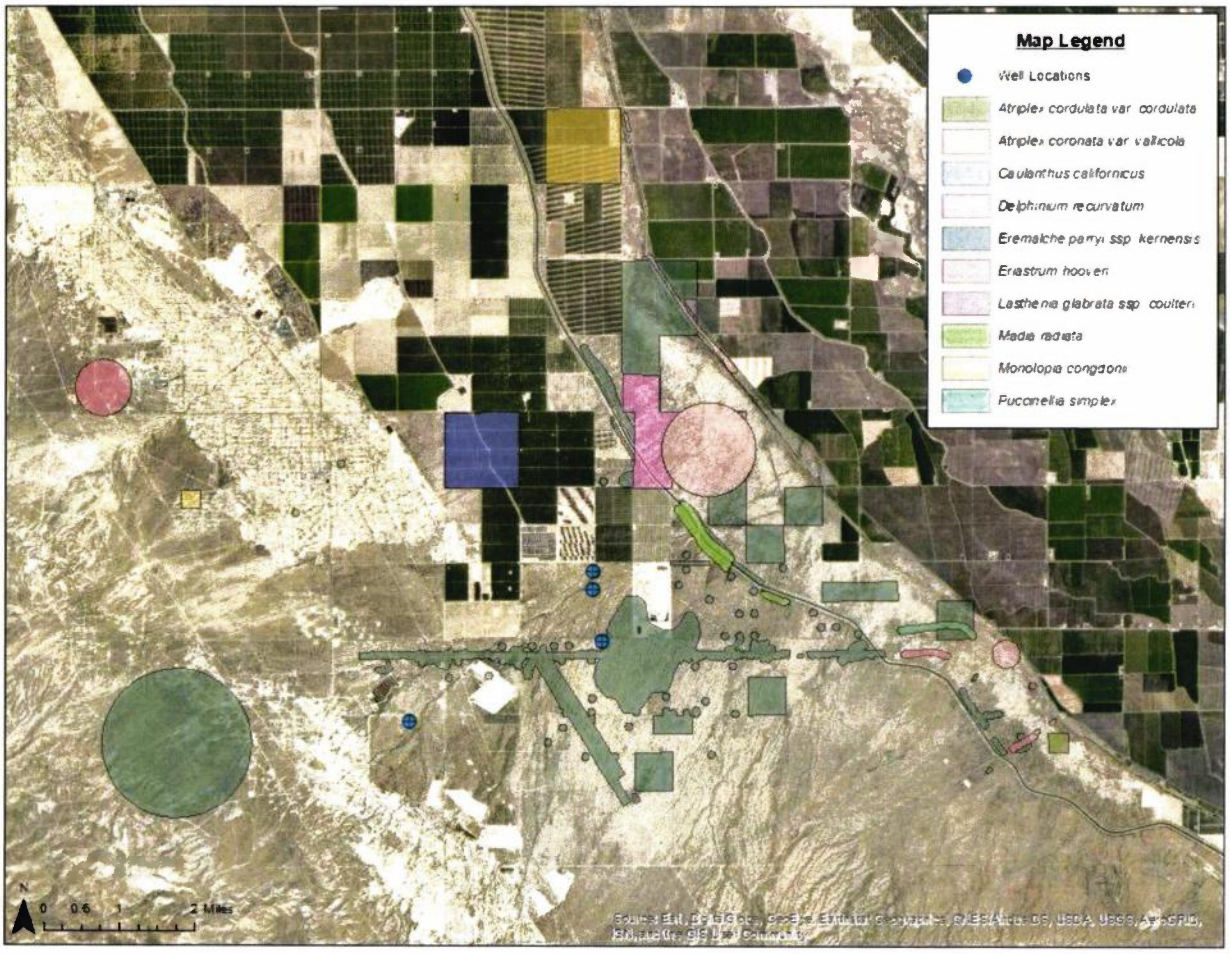
CDFG 2005; CDFW 2016

STATUS: Federal

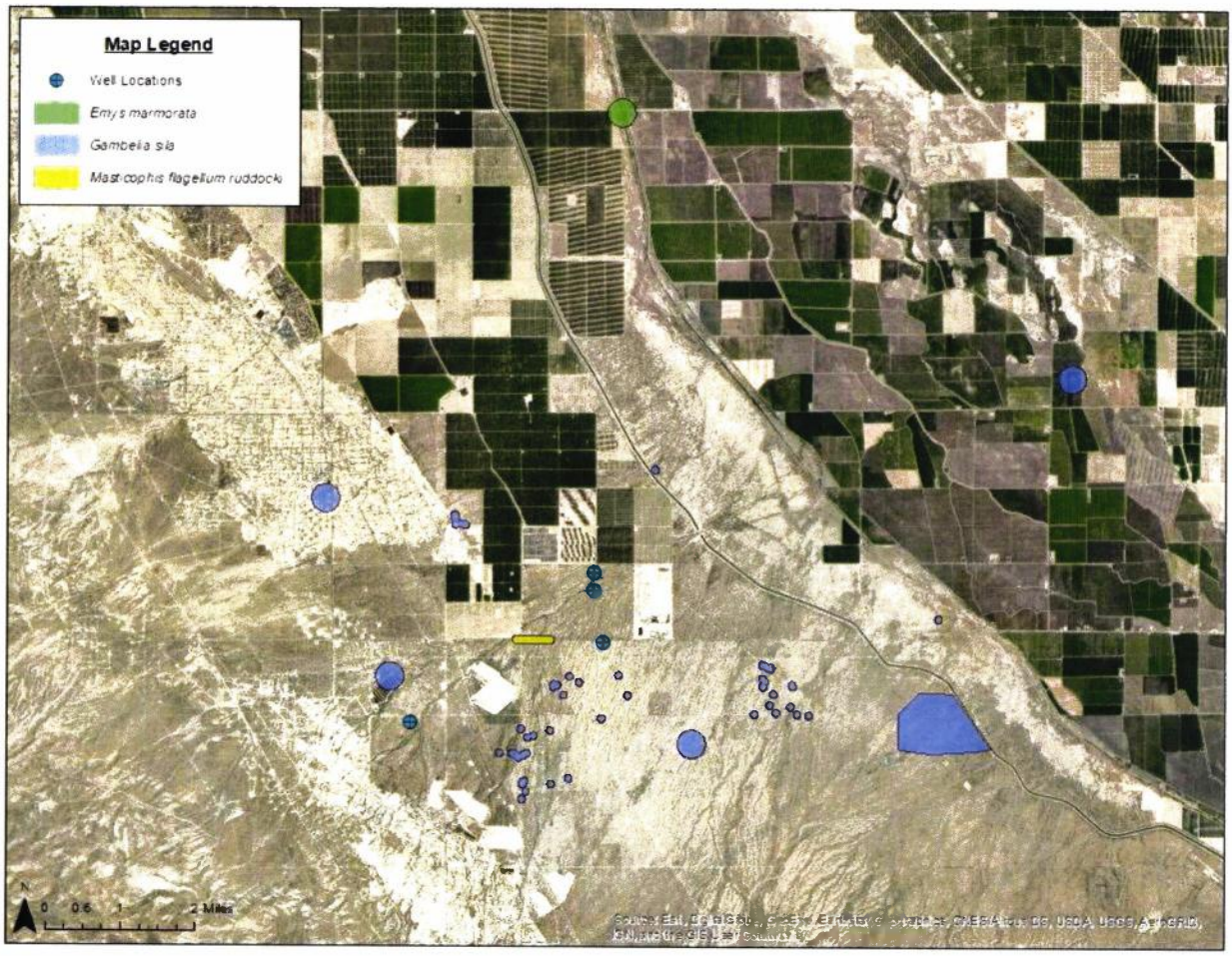
S	Bureau of Land Management Sensitive Species
E	Listed as Endangered
PT	Proposed as Threatened
T	Listed as Threatened
-	No Listing Status

State

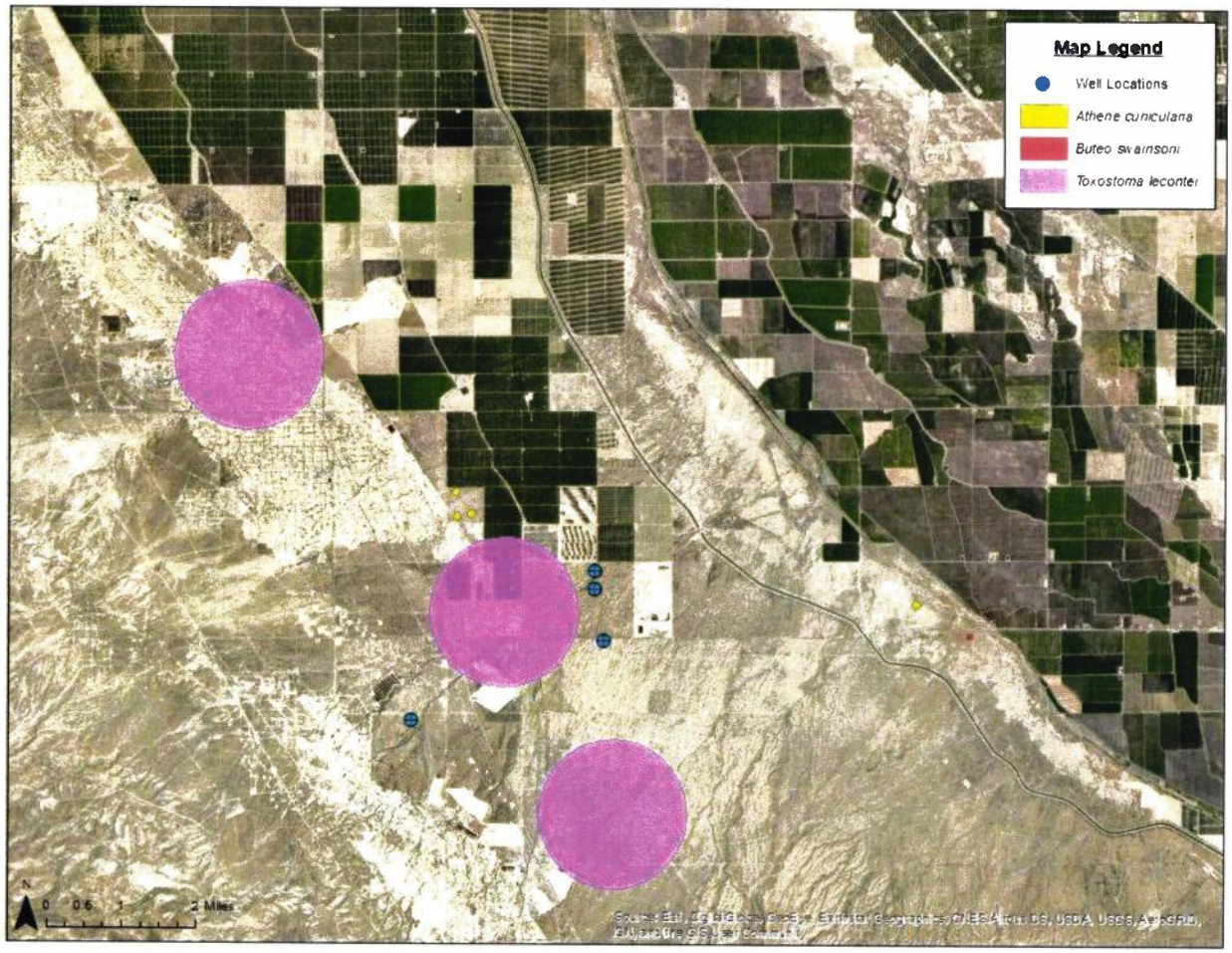
CSC	California Department of Fish and Wildlife Designated Species of Special Concern
E	Listed as Endangered
SFP	California Department of Fish and Wildlife Designated Fully Protected
T	Listed as Threatened
WL	Watch List
-	No Listing Status



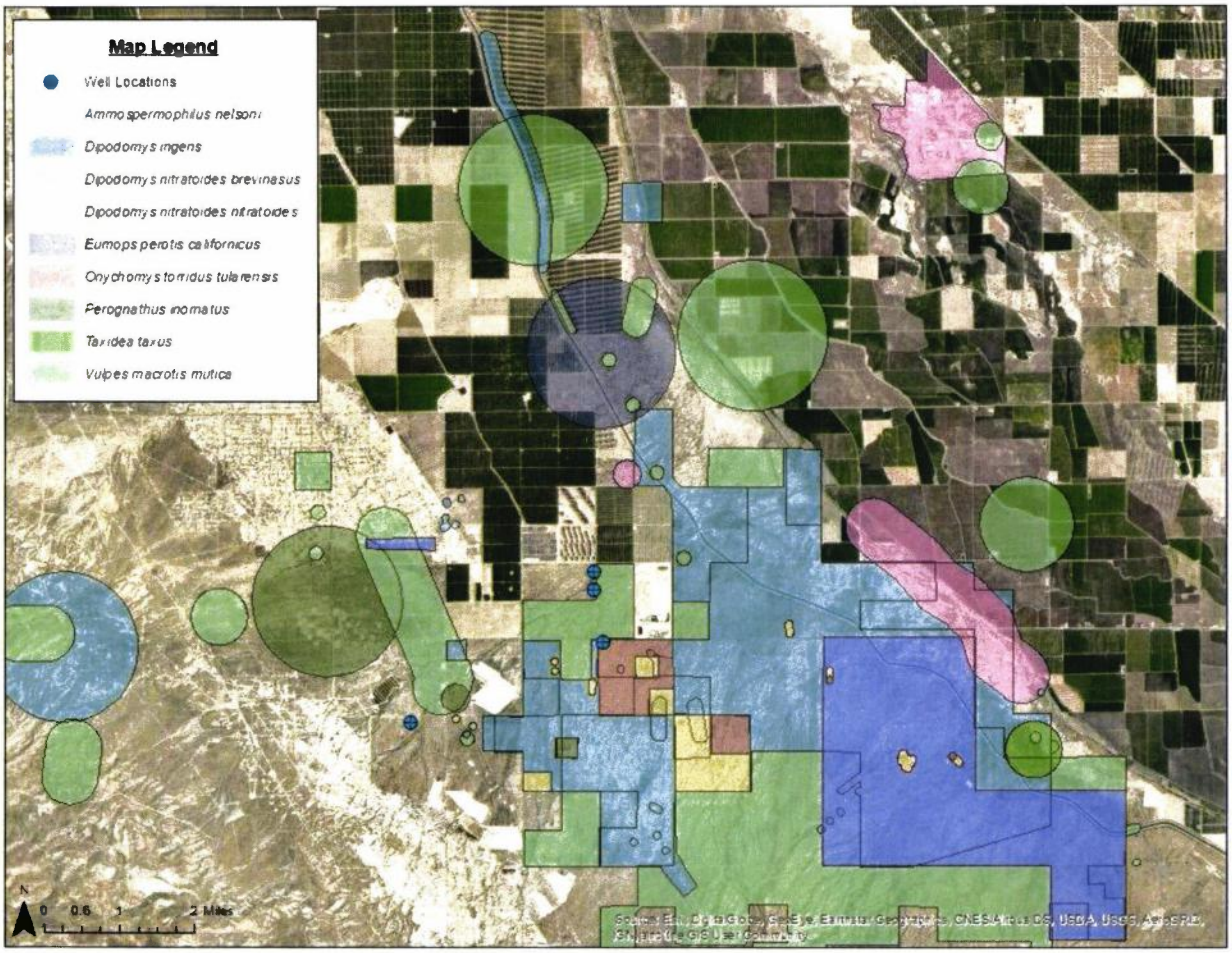
Attachment 8: Valley Water Management Well Location CNDDB Map-Plants



Attachment 9: Valley Water Management Well Location CNDDB Map-Amphibians and Reptiles



Attachment 10: Valley Water Management Well Location CNDDB Map-Birds



Attachment 11: Valley Water Management Well Location CNDDB Map-Mammals

Attachment 12: Plant and Wildlife Observations

Scientific name	Common name
Plants	
Amsinckia sp.	Fiddleneck
Atriplex polycarpa	Common saltbush
Avena fatua	Common wild oat
Bromus madritensis ssp. *rubens*	Red brome
Erodium cicutarium	Red-stem filaree
Hirschfeldia incana	Summer mustard
Wildlife	
Ammospermophlus nelsoni	=Nelson's antelope squirrel; San Joaquin antelope squirrel*
Aspidoscelis tigris munda	California whiptail
Buteo jamaicensis	Red-tailed hawk
Canis latrans	Coyote
Cathartes aura	Turkey vulture
Corvus corax *Spermophilus beecheyi* *Uta stansburiana*	Common raven California ground squirrel Western side-blotched lizard
Dipodomys sp.	Kangaroo rat (skull)
Falco sparverius	American kestrel
Lepus californicus	Blacktailed jackrabbit
Mimus polyglottos	Northern mockingbird
Otospermophilus beecheyi	California ground squirrel
Sturnella neglecta	Western meadowlark
Taxidea taxus	American badger* (digs)
Toxostoma lecontei	Le Conte's thrasher*
Tyrannus verticalis	Western kingbird
Zenaida macroura	Mourning dove

* Special-status Species

Attachment 13: San Joaquin Antelope squirrel observations recorded during the site visit. Many were many young of the year individuals observed. San Joaquin antelope squirrel is the red diamond.